

The chapter headings cover disorders of amino-acid, lipid, carbohydrate, endocrine and connective tissue metabolism, and there is a separate chapter on chromosome anomalies, leaving a great variety of conditions to be dealt with under 'other conditions known to cause mental retardation'. There might perhaps be something to be said for looking at genetic and environmental factors separately. Tuberos sclerosis is classed as a 'lesion of unknown origin', presumably because the nature of the metabolic error is not known, and it is said to be inherited 'by means of an autosomal recessive character'. There is a further claim that 'recently it has been found possible to detect heterozygous carriers by means of appropriate skin biopsy samples'. Neither of these statements corresponds with orthodox teaching, which is that the condition is transmissible in a dominant manner. It would be interesting to know the source of the authors' opinion.

Likewise, the Duchenne type of pseudo-hypertrophic muscular dystrophy is usually held to be sex-linked, and, indeed, a muscular dystrophy unit consists almost entirely of boys. Yet the authors state that the 'inheritance of this condition is by means of an autosomal dominant character'. In regard to dystrophia myotonica they claim that 'anticipation' occurs, though this notion is now usually dismissed as an impression created by uneven selection of case material from different generations.

It is not very clear why some syndromes which are fairly clear-cut and not uncommon in mental retardation, such as the Sturge-Weber syndrome, receive only a passing mention, whereas ovalocytosis, which must be excessively rare as a cause of mental retardation, has a whole page.

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### SMOKING BY NUMBERS

**The Psychological Dynamics of Smoking.** By F. E. EMERY, E. LINDEN HILGENDORF and B. L. IRVING. London: Tavistock Institute of Human Relations. (Tobacco Research Council Research Paper 10), 1968. Pp. 90. No price stated.

If my late Aunt Maud, a vigorous chatterbox, had been taught statistical jargon, she would have produced discourses much like this.

Initially, the notion that fags calm you down is transmuted into cigarettes 'fulfil the function of an external inhibitor of experienced affect', and by recruiting that most agile of current O.K. words 'arousal' this is promoted to the dignity of an explana-

tion. However, the authors give theory only conversational value, and they announce that 'no attempt was made to postulate or test hypotheses'. And they kid us not; it is a suck-it-and-see venture all the way.

On methods we are promised the joys of 'causal path analysis', 'scalogram techniques', 'critical interaction analysis' and other goodies, but when the experimental quest begins this turns out to be the earth-shaking novelty of a questionnaire given to a lot of people and cluster-analysed.

From then on in we are regaled with lists of minute correlations between clusters of items, with assorted tittle-tattle attached to each cluster to 'explain' it. True, with an  $n$  of 2,000, tiny correlations are significant (e.g.  $r = 0.10$  means  $p < .05$ ), but such correlations indicate so trifling an amount of variance in common between items that they are simply not worth discussing—any tendentious quirk of circumstances will produce them. Thus Bakan showed that, given questionnaire data for a very large  $n$ , he could subdivide the  $n$  arbitrarily and indefinitely (East *v.* West of the Mississippi, Maine *v.* the rest, etc.) and find a string of statistically significant differences, which logically signified nothing much.

Consider the following bit of chit-chat: 'However, there are strong links between labile indicators and two items symptomatic of inhibition of affect—*Rightist Ideology* (113) and *Good Family Roles* (114). The labile reactive individual who self-consciously attempts to demonstrate his maturity by rigid self-control chooses cigarettes as an appropriate means of combating boredom or concentrating. This suggests that authoritarianism is an adequate defence against lability in active situations, but in passive mental situations the authoritarian "Keep busy and forget it" orientation to life's problems is ineffective, and cigarettes are used to produce an acceptable level of affect control.' This is part of an explanation of a set of seven inter-correlations ranging from .06 to .21 and containing rubrics like *Anger at Contempt* which, if we check back to the questionnaire, turns out to mean neither more nor less than saying yes to the statements 'Familiarity breeds contempt' and 'Life sometimes smells bad'. The 'findings' consist of 31 of these bundles of vaguely together items, each accompanied by a paragraph or two of such speculative verbiage.

The whole confection is to science what painting by numbers is to art.

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